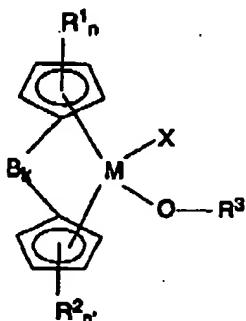


BINGEL et al., Ser. No. 09/701,658

AMENDMENTS TO THE CLAIMS

1-15. (canceled)

16. ¹ (currently amended) A compound of the formula (I),

where

M is a metal of transition group IV, V or VI of the Periodic Table of the Elements

Ti, Zr or Hf,

R¹ are identical or different and are each a radical Si(R¹²)₃, where R¹² are identical or different and are each a hydrogen atom or a C₁-C₄₀-group, or R¹ is a C₁-C₃₀-group, or two or more radicals R¹ may be connected to one another in such a way that the radicals R¹ and the atoms of the cyclopentadienyl ring which connect them form a C₄-C₂₄-ring system which may in turn be substituted,

R² are identical or different and are each a radical Si(R¹²)₃, where R¹² are identical or different and are each a hydrogen atom or a C₁-C₄₀-group, or R² is a C₁-C₃₀-group, or two or more radicals R² may be connected to one another in such a way that the radicals R² and the atoms of the cyclopentadienyl ring which connect them form a C₄-C₂₄-ring system which may in turn be substituted,

BINGEL et al., Ser. No. 09/701,658

R^3 are identical or different and are each a C_6-C_{24} -aryl, C_5-C_{24} -heteroaryl, is C_7-C_{30} -alkylaryl, fluorinated C_6-C_{24} -aryl, or fluorinated C_7-C_{30} -alkylaryl,

X is a halogen atom,

n is from 0 to 4,

n' is from 0 to 4,

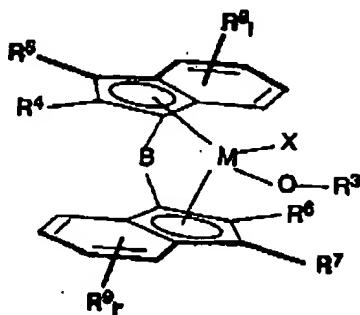
k is 1,

B is a bridging structural element between the two cyclopentadienyl rings defined as $M^3R^{13}R^{14}$, wherein M^3 is carbon or silicon and R^{13} and R^{14} are identical or different and are C_1-C_{10} -alkyl, C_6-C_{14} -aryl or trimethyl silyl,
and

one or both cyclopentadienyl rings are substituted in such a way that they form an indenyl ring.

17-21. (canceled)

22. ² ¹ (currently amended) The compound of claim 21 claim 16 having the formula



where

$R^4 - R^7$ are identical or different and are each a hydrogen atom or a C_1-C_{20} -group,

BINGEL et al., Ser. No. 09/701,658

R^8, R^9 are identical or different and are each a hydrogen atom, a halogen atom or a C_1 -
 C_{20} -group, and two radicals R^8 or R^9 may form a monocyclic or polycyclic ring
system which in turn be substituted,

R^3, M , and X and B are as previously defined,

and

I, I' are identical or different and are each an integer from zero to 4.

23-26. (canceled)

27. ⁴ (currently amended) The compound of claim 24 ² claim 22 wherein the indenyl rings are
identical.

28. ⁵ (previously presented) The compound of claim 27 ⁴ wherein M is Zr , the indenyl rings are
2-methyl-4,5-benzoindenyl or 2-methyl-indenyl and X is chlorine.

29. ⁶ (previously presented) The compound of claim 28 ⁵ wherein the indenyl rings are 2-
methyl-4,5-benzoindenyl.

30. ⁹ (previously presented) The compound of claim 28 ⁵ wherein the indenyl rings are 2-
methyl-indenyl.

31. ⁷ (currently amended) The compound of claim 29 ⁶ wherein R^3 is 2,4-tert-butyl-phenyl 2,4-
di-tert-butyl-phenyl, 2,4-di-tert-pentyl-phenyl or 2-isopropyl-5-methyl-phenyl.

32. ¹⁰ (currently amended) The compound of claim 30 ⁹ wherein R^3 is 2,4-di-tert-butyl-
phenyl or 2-isopropyl-5-methyl-phenyl.

33. ¹² (currently amended) The compound of claim 27 ⁴ wherein B is $SiR^{13}R^{14}$ wherein R^{13} and
 R^{14} are identical or different and are each hydrogen or C_1-C_{20} -hydrocarbon-containing
group Me or Ph.

34. ⁸ (previously presented) The compound of claim 31 ⁷ wherein B is dimethylsilanediyl.

BINGEL et al., Ser. No. 09/701,658

~~35.~~ ¹¹ (previously presented) The compound of claim ~~32~~ ¹⁰ wherein B is dimethylsilanediyl.

~~36.~~ ³ (previously presented) The compound of claim ~~22~~ ² wherein X is chlorine.

~~37.~~ ¹⁷ (currently amended) A catalyst comprising at least one compound as claimed in claim ~~16~~ ¹
and a support and, optionally, a cocatalyst.

~~38.~~ ¹⁸ (currently amended) A process for preparing a polyolefin which comprises polymerizing
an olefinic monomer in the presence of a catalyst as claimed in claim ~~33~~ ¹⁷ claim ~~32~~ ¹⁷.

~~39.~~ ¹³ (new) The compound of claim ~~16~~ ¹, wherein the moiety MX(OR³) is
zirconium monochloride mono(2,4-di-tert-butylphenoxide),
zirconium monochloride mono(2,6-di-tert-butylphenoxide),
zirconium monochloride mono(3,5-di-tert-butylphenoxide),
zirconium monochloride mono(2,6-di-sec-butylphenoxide),
zirconium monochloride mono(2,4-di-methylphenoxide),
zirconium monochloride mono(2,3-di-methylphenoxide),
zirconium monochloride mono(2,5-di-methylphenoxide),
zirconium monochloride mono(2,6-di-methylphenoxide),
zirconium monochloride mono(3,4-di-methylphenoxide),
zirconium monochloride mono(3,5-di-methylphenoxide),
zirconium monochloride mono(2-methylphenoxide),
zirconium monochloride mono(3-methylphenoxide),
zirconium monochloride mono(4-methylphenoxide),
zirconium monochloride mono(2-ethylphenoxide),
zirconium monochloride mono(3-ethylphenoxide),
zirconium monochloride mono(4-ethylphenoxide),

BINGEL et al., Ser. No. 09/701,658

zirconium monochloride mono(2-sec-butylphenoxide),
zirconium monochloride mono(2-tert-butylphenoxide),
zirconium monochloride mono(3-tert-butylphenoxide),
zirconium monochloride mono(4-sec-butylphenoxide),
zirconium monochloride mono(4-tert-butylphenoxide),
zirconium monochloride mono(2-isopropyl-5-methylphenoxide),
zirconium monochloride mono(4-isopropyl-3-methylphenoxide),
zirconium monochloride mono(5-isopropyl-2-methylphenoxide),
zirconium monochloride mono(5-isopropyl-3-methylphenoxide),
zirconium monochloride mono(2,4-bis (2-methyl-2-butyl)phenoxide),
zirconium monochloride mono(2,6-di-tert-butyl-4-methylphenoxide),
zirconium monochloride mono(4-nonylphenoxide),
zirconium monochloride mono(isopropylphenoxide),
zirconium monochloride mono(propylphenoxide),
zirconium monochloride mono(trimethylphenoxide),
zirconium monochloride mono(tert-butyl-methylphenoxide),
zirconium monochloride mono(2-tert-butyl-4-ethylphenoxide),
zirconium monochloride mono(2,6-diisopropylphenoxide),
zirconium monochloride mono(4-octylphenoxide) or
zirconium monochloride mono(2,6-di-tert-butyl-4-ethylphenoxide).

40. ¹⁴ ₂ (new) The compound of claim ²² ₂, wherein the moiety MX(OR³) is
zirconium monochloride mono(2,4-di-tert-butylphenoxide),
zirconium monochloride mono(2,6-di-tert-butylphenoxide),

BINGEL et al., Ser. No. 09/701,658

zirconium monochloride mono(3,5-di-tert-butylphenoxide),
zirconium monochloride mono(2,6-di-sec-butylphenoxide),
zirconium monochloride mono(2,4-di-methylphenoxide),
zirconium monochloride mono(2,3-di-methylphenoxide),
zirconium monochloride mono(2,5-di-methylphenoxide),
zirconium monochloride mono(2,6-di-methylphenoxide),
zirconium monochloride mono(3,4-di-methylphenoxide),
zirconium monochloride mono(3,5-di-methylphenoxide),
zirconium monochloride mono(2-methylphenoxide),
zirconium monochloride mono(3-methylphenoxide),
zirconium monochloride mono(4-methylphenoxide),
zirconium monochloride mono(2-ethylphenoxide),
zirconium monochloride mono(3-ethylphenoxide),
zirconium monochloride mono(4-ethylphenoxide),
zirconium monochloride mono(2-sec-butylphenoxide),
zirconium monochloride mono(2-tert-butylphenoxide),
zirconium monochloride mono(3-tert-butylphenoxide),
zirconium monochloride mono(4-sec-butylphenoxide),
zirconium monochloride mono(4-tert-butylphenoxide),
zirconium monochloride mono(2-isopropyl-5-methylphenoxide),
zirconium monochloride mono(4-isopropyl-3-methylphenoxide),
zirconium monochloride mono(5-isopropyl-2-methylphenoxide),
zirconium monochloride mono(5-isopropyl-3-methylphenoxide),

BINGEL et al., Ser. No. 09/701,658

zirconium monochloride mono(2,4-bis (2-methyl-2-butyl)phenoxide),
zirconium monochloride mono(2,6-di-tert-butyl-4-methylphenoxide),
zirconium monochloride mono(4-nonylphenoxide),
zirconium monochloride mono(isopropylphenoxide),
zirconium monochloride mono(propylphenoxide),
zirconium monochloride mono(trimethylphenoxide),
zirconium monochloride mono(tert-butyl-methylphenoxide),
zirconium monochloride mono(2-tert-butyl-4-ethylphenoxide),
zirconium monochloride mono(2,6-diisopropylphenoxide),
zirconium monochloride mono(4-octylphenoxide) or
zirconium monochloride mono(2,6-di-tert-butyl-4-ethylphenoxide).

41. 15 (new) The compound of claim 16 wherein the solubility of said compound of formula (I) measured as molar concentration in toluene at room temperature is at least doubled compared with the solubility of the corresponding metallocene dichloride wherein X is Cl and OR³ is Cl.

42. 16 (new) The compound of claim 22 wherein the solubility of said compound of formula (I) measured as molar concentration in toluene at room temperature is at least doubled compared with the solubility of the corresponding metallocene dichloride wherein X is Cl and OR³ is Cl.